

REMARKS

Applicants appreciate the time taken by the Examiner to review Applicants' present application. This application has been carefully reviewed in light of the Official Action mailed November 21, 2006. Applicants respectfully request reconsideration and favorable action in this case.

Claim Objections

Claims 14, 29, and 44 are objected to because of the following informalities: In Claims 14, 29, and 44 replace "though" with "through" and in Claims 14 and 29 replace "network wireless" with "wireless network". Appropriate correction is required.

The applicant respectfully submits that the Claims 14, 29 and 44 have been amended to overcome this objection.

CLAIM REJECTIONS - 35 USC § 102

Claims 1 - 3, 10, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis et al. (U.S. Application # 2003/0143987). The examiner states:

Consider Claims 1 and 18, Davis et al. disclose a telematics unit (202) (read as mobile relay device) comprising (see fig. 1 - 2; abstract): a WLAN node (226) (read as first wireless interface) operable to communicate with a wireless device (118) over the wireless network of the vehicle (read as intra-vehicular network); a network access device (232) (read as second wireless interface) operable to communicate with a communication network outside the vehicle (read as extravehicular network); and a telematics unit (202) (read as vehicular mountable relay) that communicatively couples the WLAN node (226) (read as

first wireless interface) and network access device (232) (read as second wireless interface) and routes communications between the wireless device (118) and the communication network outside the vehicle (read as extravehicular network) (see fig. 1 - 2; abstract).

Consider Claim 2 as applied to claim 1, Davis et al. disclose a wireless device (118) is a cellular radiotelephone which is able to communicate with a WLAN (read as intra-vehicular wireless network and short range digital radio network) within the vehicle and also since it is a cellular phone therefore it can communicate with the cellular network (read as extravehicular network) (see [0023 - 0024]; fig. 1 - 3).

Consider Claims 3 and 19 as applied to Claims 2 and 18, Davis et al. disclose WLAN is a Bluetooth network (see [0023]).

Consider Claim 10 as applied to Claim 1, Davis et al. disclose telematics unit (202) (read as mobile network relay) comprising GPS (222) (read as extravehicular network is a satellite based wireless communication network) (see fig. 2).

Applicant submits that Davis fails to teach or suggest the invention recited in the Claims, because Davis teaches away from the Applicant's invention which allows servicing of a wireless device and ongoing wireless communications to be handed over from a first extravehicular network to a second extravehicular network.

Davis merely teaches that the servicing of a wireless device and wireless communication may be handed from one communication link (communication link 120 of FIG. 1) to a second communication link (communication links 112 and 122 of FIG. 1) where both communication links are directed to a single wireless carrier (wireless carrier 110 of FIG. 1). The present invention claims that the servicing of the wireless device and wireless communication may be handed from one communication link serviced by a first extravehicular wireless network to a second communication link serviced by a second extravehicular wireless network where both communication links may be directed to a different wireless networks. For example the first extravehicular wireless network may be a wireless local area network (WLAN) associated with a specific geographic location or building. Thus, the call may initially be a VoIP call delivered

through an internet connection via the WLAN. The second extravehicular wireless network may be for example a cellular network. As the user transitions from the specific geographic location to a vehicle, to support the ongoing wireless communication, the servicing of a wireless device and wireless communication may be handed over to a mobile network relay device serviced by the second extravehicular wireless network such as a cellular provider.

Thus, the applicant respectfully submits that Davis fails to teach the claimed invention. The applicant respectfully submits that a clear distinction may be made between Davis and the present invention wherein Davis uses only one extravehicular network to service a wireless device and wireless communication while the present invention claims that multiple extravehicular networks may be used to seamlessly service a wireless device and ongoing wireless communication. As such, Applicant respectfully requests the Examiner withdraw the rejections and allow Claims 1 - 3, 10, and 19.

CLAIM REJECTIONS - 35 USC § 103

Claims 4-9, and 11-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (U.S. Application # 2003/0143987) in view of Hunkeler (U.S. Application # 2005/0288021). The examiner states:

Consider Claims 4 and 20 as applied to Claims 1 and 18, Davis et al. disclose providing handoff Services for the wireless device (118) between a local in-vehicle connection and an external network connection or cellular network connection (read as extravehicular wireless network) (see [0031 - 0034]).

However, Davis et al. fail to disclose a coverage area of the intra-vehicular wireless network overlaps with a coverage area of a premises based wireless network.

In the related field of endeavor, Hunkeler discloses a WLAN (10) (read as intra-vehicular wireless network) coverage area overlapping another WLAN coverage area (read as premises based wireless) and performing handover (see fig. 1; abstract; [0030]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs.

Consider Claims 5 and 21 as applied to Claims 4 and 20, Davis et al. disclose during handoff a third communication link is made while still in communication with the first communication link (read as parallel communication exists to service wireless device; [0033]). A portable wireless communication device is coupled (read as first communication path) to telematics unit (202) by a local connection (read as premises based wireless network). In addition, a portable wireless device directs the network access device (232) that initiates a call (read as second communication path) to a wide area network (read as extravehicular wireless network) via the WLAN node (226) (read as first wireless interface), telematics unit (202) (read as vehicular mountable relay), and the network access device (232) (read as second wireless interface) (see [0031 - 0034]; figs. 1 - 3).

Consider Claims 6 and 22 as applied to Claims 4 and 20, Davis et al. disclose that wireless device (118) is a cellular telephone (read as telephone handset) (see [0019]; fig. 1).

Consider Claims 7 and 23 as applied to Claims 4 and 20, Davis et al. disclose wireless device (118) is personal digital assistant (see [0019]).

Consider Claims 8 and 24 as applied to Claims 4 and 20, Davis et al. fail to disclose handoff from first premises based wireless network to a cellular network to a second premises based wireless network.

In the related field of endeavor, Hunkeler discloses a WLAN (10) (read as first premises based wireless network) coverage area, where the said WLAN's geographical coverage area overlaps with that of various alternative technologies (read as cellular network and second premises based wireless network) and handoff Services are provided from one technology to another (read as handoff from first premises based wireless network to cellular network to second premises based wireless network) (see [0030]; abstract and fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider Claims 9 and 25 as applied to Claims 8 and 24, Davis et al. fail to disclose first premises based wireless network and the second premises based wireless network have non-contiguous Service coverage areas.

In the related field of endeavor, Hunkeler discloses WLANs and coverage areas for alternative technologies, where, handoffs are serviced as necessary and as WTRUs move from one coverage area to another, eventually there will be a handoff from a first WLAN (first premises based wireless network) to a second WLAN (read as second premises based wireless network) where the coverage areas will be non contiguous for the two WLANs (read as premises based wireless network) (see fig. 1; abstract; [0030]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular and at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider Claims 11 and 26 as applied to Claims 6 and 18, Davis et al. disclose wireless communication device of the vehicle (read as vehicular mountable relay) can Signal strength of the communication link (read as capabilities of the telephone hand set) (see [0029]).

Consider Claims 12 and 27 as applied to Claims 11 and 26, Davis et al. disclose creating a third communication link while still in communication with the first and second link and terminating the first and second communication based upon the Signal quality (read as handoff decision based upon the capabilities of the telephone hand set) (see [0029]).

Consider Claims 13 and 28 as applied to Claims 12 and 27, Davis et al. disclose wireless device (230) (read a telephone hand set) has a WLAN

transceiver (331) and transmitter (323) and receiver (327) (read as Bluetooth, 802.11, and/or cellular interfaces) (see fig. 3; [0024]).

Consider Claims 14 and 29 as applied to Claims 13 and 28, Davis et al. disclose a second communication link (read as cellular connection) through the cellular radiotelephone's (read as telephone hand set) cellular interface by way of network access device comprised within the telematics unit (202) has a signal quality determined by the telematics unit (202). A third communication link (read as a communication pathway) is created between the portable wireless communication device and the device associated with the destination number (read as extravehicular wireless network) has a signal quality (read as second Signal quality) (see [0031 -0034]). In addition, a Controller (204) (read as processor) directs communications of the wireless device be service by the cellular connection or extravehicular wireless network based upon the quality of the signal strengths (read as first and second quality of Signals) (see fig. 2; [0031-0034]).

Consider Claims 15 and 30 as applied to Claims 13 and 28, Davis et al. as modified by Hunkeler disclose a processor that directs that communications of the wireless device be serviced by the Bluetooth, 802.11, or cellular interfaces (see fig. 1; [0030 - 0031]), but fail to disclose based on power consumption associated with the Bluetooth, 802.11, and cellular interfaces.

Nevertheless, in another embodiment, Hunkeler discloses establishing connection with alternative technologies (read as Bluetooth, 802.11, and cellular) in a handover Situation based on power consumption associated (see pg. 4, Claims 1 & 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular and at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider Claims 16 and 31 as applied to Claims 5 and 21, Davis et al. disclose wireless communication device of the vehicle (read as vehicular

mountable relay) detects the receiver signal strength (read as monitors signal strength) of the first communication link (read as premises based wireless network) and initiates a third communication link (read as handoff) between the portable wireless communication device and the device associated with the destination number (read as extravehicular network) and the first is terminated once a third communication link has been established based on Signal strength (read as hand off to extravehicular wireless network when the signal strength compares unfavorably to a handoff threshold) (see [0027 - 0030]).

Consider Claims 17 and 32 as applied to Claims 1 and 18, Davis et al. disclose transferring parameters between the portable wireless communication device and the network access device (read as wireless device is registered with the first wireless interface) (see [0031]).

Consider claim 33, Davis et al. disclose a first communication link by way of WLAN node (226) (read as premises based wireless network) is created between a portable wireless device (read as mobile wireless device) and the network access device of the vehicle would enable transfer of data or audio Signals (read as resources available through the premises based wireless network) (see [0027]). In addition, Davis et al. disclose handing off the wireless device using first, second, and third communication links (read as parallel communication pathways) in order to allow continuous communication between the mobile wireless device and the resources (see [0027 - 0030]). Also, during handoff a third communication link is made while still in communication with the first communication link (read as parallel communication exists to service wireless device; [0033]). A portable wireless communication device is coupled (read as first communication path) to telematics unit (202) by a local connection (read as premises based wireless network). In addition, a portable wireless device directs the network access device (232) that initiates a call (read as second communication path) to a wide area network (read a extravehicular wireless network) via the WLAN node (226) (read as first wireless interface), telematics unit (202) (read as vehicular mountable relay), and the network access device (232) (read as second wireless interface) (see [0031 - 0034]; figs. 1 - 3).

However, Davis et al. fail to disclose moving the mobile wireless device to an area wherein coverage of the premises based wireless network overlaps an intra-vehicular wireless network; establishing a parallel communication pathways that comprise: a first communication path between the mobile wireless device and the premises based wireless network; and a second communication path between the mobile wireless device and an extravehicular wireless network via a vehicular wireless interface, a vehicular mountable relay, and an extra-vehicular wireless interface; and handing the wireless device from the premises based wireless network to the intra-vehicular wireless network.

In the related field of endeavor, Hunkeler discloses a WLAN (10) (read as intra-vehicular wireless network) coverage area overlapping another WLAN coverage area (read as premises based wireless) and performing handover (see fig. 1; abstract; [0030]). In addition, Hunkeler discloses WLAN network (premises based wireless network) handing over to other WLAN network (intra-vehicular wireless network) (see fig. 1; [0030-0031]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular and at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider claim 34 as applied to claim 33, Davis et al. disclose WLAN is a Bluetooth network (see [0023]) and parallel communication pathway is cellular network since a cellular radiotelephone is disclosed (see fig. 1-3; [0024]).

Consider claim 35 as applied to claim 33, Davis et al. disclose a first communication link between a portable wireless communication device (read as mobile wireless device) and a wireless communication device of the vehicle (read as vehicular wireless interface) by way of WLAN node (226) (read as vehicular wireless network) relaying communications between the portable wireless communication device (read as mobile wireless device) and transfer of data and audio Signals (read as resources) from the wireless communication device of the vehicle (read as vehicular wireless interface), through a telematics unit (202) (read

as mobile network relay), and to a network access device (232) (read as extravehicular wireless interface) operable to establish a second communication link (read as communication pathway) with an external network (see fig. 1-3; [0027 - 0030]).

Consider claim 36 as applied to claim 35, Davis et al. disclose that wireless device (118) is a cellular telephone (read as telephone handset) (see [0019]; fig. 1).

Consider Claim 37 as applied to claim 35, Davis et al. disclose wireless device (118) is personal digital assistant (see [0019]).

Consider claim 38 as applied to claim 35, Davis et al. fail to disclose handoff from first premises based wireless network to a cellular network to a second premises based wireless network.

In the related field of endeavor, Hunkeler discloses a WLAN (10) (read as first premises based wireless network) coverage area, where the said WLAN's geographical coverage area overlaps with that of various alternative technologies (read as cellular network and second premises based wireless network) and handoff Services are provided from one technology to another (read as handoff from first premises based wireless network to cellular network to second premises based wireless network) (see [0030]; abstract and fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider claim 39 as applied to claim 38, Davis et al. fail to disclose first premises based wireless network and the second premises based wireless network have non-contiguous service coverage areas.

In the related field of endeavor, Hunkeler discloses WLANs and coverage areas for alternative technologies, where, handoffs are serviced as necessary and as WTRUs move from one coverage area to another, eventually there will be a handoff from a first WLAN (first premises based wireless network) to a second

WLAN (read as second premises based wireless network) where the coverage areas will be non contiguous for the two WLANs (read as premises based wireless network) (see fig. 1; abstract; [0030]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular and at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider Claim 40 as applied to claim 33, Davis et al. disclose telematics unit (202) (read as mobile network relay) comprising GPS (222) (read as extravehicular network is a satellite based wireless communication network) (see fig. 2).

Consider claim 41 as applied to claim 33, Davis et al. disclose wireless communication device of the vehicle (read as vehicular mountable relay) can signal strength of the communication link (read as capabilities of the telephone hand set) (see [0029]).

Consider claim 42 as applied to claim 41, Davis et al. disclose creating a third communication link while still in communication with the first and second link and terminating the first and second communication based upon the Signal quality (read as handoff decision based upon the capabilities of the telephone hand set) (see [0029]).

Consider claim 43 as applied to claim 42, Davis et al. disclose wireless device (230) (read a telephone hand set) has a WLAN transceiver (331) and transmitter (323) and receiver (327) (read as Bluetooth, 802.11, and/or cellular Interfaces) (see fig. 3; [0024]).

Consider claim 44 as applied to claim 43, Davis et al. disclose a second communication link (read as cellular connection) through the cellular radiotelephone's (read as telephone hand set) cellular interface by way of network access device comprised within the telematics unit (202) has a signal quality determined by the telematics unit (202). A third communication link (read as a communication pathway) is created between the portable wireless communication

device and the device associated with the destination number (read as extravehicular wireless network) has a signal quality (read as second signal quality) (see [0031 - 0034]). In addition, a Controller (204) (read as processor) directs communications of the wireless device be service by the cellular connection or extravehicular wireless network based upon the quality of the signal strengths (read as first and second quality of Signals) (see fig. 2; [0031- 0034]).

Consider claim 45 as applied to claim 43, Davis et al. as modified by Hunkeler disclose a processor that directs that communications of the wireless device be serviced by the Bluetooth, 802.11, or cellular interfaces (see fig. 1; [0030 - 0031]), but fail to disclose based on power consumption associated with the Bluetooth, 802.11, and cellular interfaces.

Nevertheless, in another embodiment, Hunkeler discloses establishing connection with alternative technologies (read as Bluetooth, 802.11, and cellular) in a handover Situation based on power consumption associated (see pg. 4, Claims 1 & 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Davis et al. with the teachings of Hunkeler in order to provide interoperability between WLANs and alternative technologies such as cellular and at the same time providing an uninterrupted communication link with the same or better level of quality.

Consider claim 46 as applied to claim 45, Davis et al. disclose wireless communication device of the vehicle (read as vehicular mountable relay) detects the receiver Signal strength (read as monitors Signal strength) of the first communication link (read as premises based wireless network) and initiates a third communication link (read as handoff) between the portable wireless communication device and the device associated with the destination number (read as extravehicular network) and the first is terminated once a third communication link has been established based on signal strength (read as hand off to extravehicular wireless network when the signal strength compares unfavorably to a handoff threshold) (see [0027 - 0030]).

Consider claim 47 as applied to claim 33, Davis et al. disclose transferring Parameters between the portable wireless communication device and the network access device (read as wireless device is registered with the first wireless interface) (see [0031]).

Applicant respectfully points out that in order to combine references for an obviousness rejection, there must be some teaching, suggestion or incentives supporting the combination. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989). The mere fact that the prior art could be modified does not make that modification obvious unless the prior art suggests the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, it is well established that Applicant's disclosure cannot be used to reconstruct Applicant's invention from individual pieces found in separate, isolated references. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988).

Applicant respectfully submits that there is no motivation, teaching or suggestion to combine Davis with Hunkeler. Therefore, the rejection on a combination of these references is inappropriate. Withdrawal of the rejection allowance of Claims 4 and 36 respectfully requested.

Applicant further submits that neither Davis or Hunkeler alone nor the combination of the two teaches or suggests make obvious the invention recited in Claims 4 and 36 because the cited references teach away from the Applicant's invention which allows a wireless device and wireless communication to be handed over from a first extravehicular network to a second extravehicular network.

Applicant submits that Davis fails to teach or suggest the invention recited in the Claims, because Davis teaches away from the Applicant's invention which allows servicing of a wireless device and ongoing wireless communications to be handed over from a first extravehicular network to a second extravehicular network.

Davis merely teaches that the servicing of a wireless device and wireless communication may be handed from one communication link (communication link 120 of FIG. 1) to a second communication link (communication links 112 and 122 of FIG. 1) where both communication links are directed to a single wireless carrier (wireless carrier 110 of FIG. 1). The present invention claims that the servicing of the wireless device and wireless communication may be handed from one communication link serviced by a first extravehicular wireless network to a

second communication link serviced by a second extravehicular wireless network where both communication links may be directed to a different wireless networks. For example the first extravehicular wireless network may be a wireless local area network (WLAN) associated with a specific geographic location or building. Thus, the call may initially be a VoIP call delivered through an internet connection via the WLAN. The second extravehicular wireless network may be for example a cellular network. As the user transitions from the specific geographic location to a vehicle, to support the ongoing wireless communication, the servicing of a wireless device and wireless communication may be handed over to a mobile network relay device serviced by the second extravehicular wireless network such as a cellular provider.


Thus, the applicant respectfully submits that Davis fails to teach the claimed invention. The applicant respectfully submits that a clear distinction may be made between Davis and the present invention wherein Davis uses only one extravehicular network to service a wireless device and wireless communication while the present invention claims that multiple extravehicular networks may be used to seamlessly service a wireless device and ongoing wireless communication. As such, Applicant respectfully requests the Examiner withdraw the rejections and allow Claims 4-9, and 11-47

CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1-47.

The Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-2126 of Garlick, Harrison and Markison.

Respectfully submitted,



By: _____

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